



Editorial

The 2023 SLAS Technology ten: Translating life sciences innovation

Looking back on the 27th year of SLAS Technology, we are excited by the continued innovations and evolving technology that are facilitating life science and biomedical research. SLAS Technology plays a unique role in being a focused presenter of these advances and we are proud of the novel technology innovations published in SLAS Technology this year. With the rise of digital technologies, we continue to see a trend towards increased implementation of artificial intelligence (AI) and digital tools across all aspects of life science and biomedical research. Advances in laboratory automation, micro- and nanotechnologies and biomaterials continue to improve the clinical relevance of life science and biomedical research. As evidenced by the work presented here, SLAS Technology continues to stay at the forefront of research trends highlighted here.

Every year, SLAS Technology Ten presents ten individual articles that stand out as the most innovative scientific achievements published in SLAS Technology in the past 12 months. The 2023 SLAS Technology Ten highlights a broad range of technologies that address a broad range of unmet needs in the laboratory and the clinic. These include advances in microtechnology to improve molecular detection and chemical characterization [1–4]. Advances in AI continue to be a major highlight of SLAS Technology. AI-driven technologies enable all aspects of life science and biomedical research and diagnostics, including directly impacting the clinic [5–7]. Automation remains a critical area of interest for SLAS Technology as automation allows for increasingly complex high-throughput drug discovery and single-cell transcriptomic library preparation workflows [8–10]. This is particularly important as life science and biomedical research moves away from 2D cell line models and towards more physiologically relevant 3D cell models. Technological advances presented here can ensure more uniform 3D cell models that are suitable for high-throughput screening with improved reproducibility.

We would like to thank the authors that contributed to the work presented in these ten most highly cited SLAS Technology papers of 2022 as well as the hundreds of other researchers who also chose to share

their technology advancements and discoveries in SLAS Technology in 2022. It is solely because of their contributions that SLAS Technology continues to present transformative technology that improves all aspects of life science and biomedical research.

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